Electronic Version
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Claims

[c1] 1. A structure of reducing source line resistance, suitable for use in a light emitting diode display that comprises a plurality of pixels, each of which comprises a light emitting diode, a source and a source line for providing required power to drive the light emitting diode, the structure comprising:
an insulation layer on the source line, the insulation layer having at least two openings exposing two ends of a part of the source line; and
at least a conductive layer covering the insulation layer and electrically connected to the source line via the openings, such that the conductive layer and at least the part of the source line are connected in parallel.

[c2] 2. The structure according to Claim 1, wherein the conductivity of the conductive layer is larger than that of the source line.

[c3] 3. The structure according to Claim 1, wherein the conductive layer comprises a plurality of conductive structures distributed between the pixels.

[c4] 4. The structure according to Claim 1, wherein the

source line further comprises a major source line to connect with the source and a plurality of branch lines to supply the power to the light emitting diode of each pixel.

[c5] 5. The structure according to Claim 4, wherein the conductive layer comprises at least a conductor located over the major source line.

[c6] 6. The structure according to Claim 4, wherein the conductive layer comprises at least a conductor located over the branch lines.

[c7] 7. A structure of reducing source line resistance, suitable for use in a light emitting diode display that comprises a plurality of pixels, each of which comprises a light emitting diode, a source and a source line for providing required power to drive the light emitting diode, the structure comprising:

an insulation layer on the source line, the insulation layer having a plurality of openings exposing the source line; and

a conductive layer covering the insulation layer and electrically connected to the source line via the openings, such that the conductive layer and at least the part of the source line are connected in parallel.

[c8] 8. The structure according to Claim 7, wherein the conductivity of the conductive layer is larger than that of the source line.

[c9] 9. The structure according to Claim 7, wherein the openings are distributed between the pixels.

[c10] 10. The structure according to Claim 7, wherein the source line further comprises a major source line to connect with the source and a plurality of branch lines to supply the power to the light emitting diode of each pixel.

[c11] 11. The structure according to Claim 10, wherein the conductive layer comprises at least a conductor located over the major source line.

[c12] 12. The structure according to Claim 10, wherein the conductive layer comprises at least a conductor located over the branch lines.

[c13] 13. A method of reducing source line resistance, suitable for use in a light emitting diode display that comprises a plurality of pixels, each of which comprises a light emitting diode, a source and a source line for providing required power to drive the light emitting diode, the method comprising:
forming an insulation layer on the source line;

forming a plurality of openings exposing the source line; and

forming a conductive layer covering the insulation layer and electrically connected to the source line via the openings, such that the conductive layer and at least the part of the source line are connected in parallel.

[c14] 14. The method according to Claim 13, wherein the conductivity of the conductive layer is larger than that of the source line.

[c15] 15. The method according to Claim 13, wherein two neighboring ones of the openings are formed on two ends of a part of the source line.

[c16] 16. The method according to Claim 13, wherein the step of forming the conductive layer further comprises forming a plurality of conductive segments to fill the openings.

[c17] 17. The method according to Claim 13, the step of forming the source line further comprises forming a major source line to connect with the source and a plurality of branch lines to supply the power to the light emitting diode of each pixel.